

United States Patent [19]

Roncero

[11] Patent Number: 4,843,801

[45] Date of Patent: Jul. 4, 1989

[54] METHODS AND APPARATUS FOR
OPENING CLOSED CONTAINERS

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[21] Appl. No.: 198,497

[22] Filed: May 25, 1988

[51] Int. Cl. 4 B65B 43/26

[52] U.S. Cl. 53/492; 53/381 R;
414/411

[58] Field of Search 53/381 R, 492; 414/411,
414/412, 414

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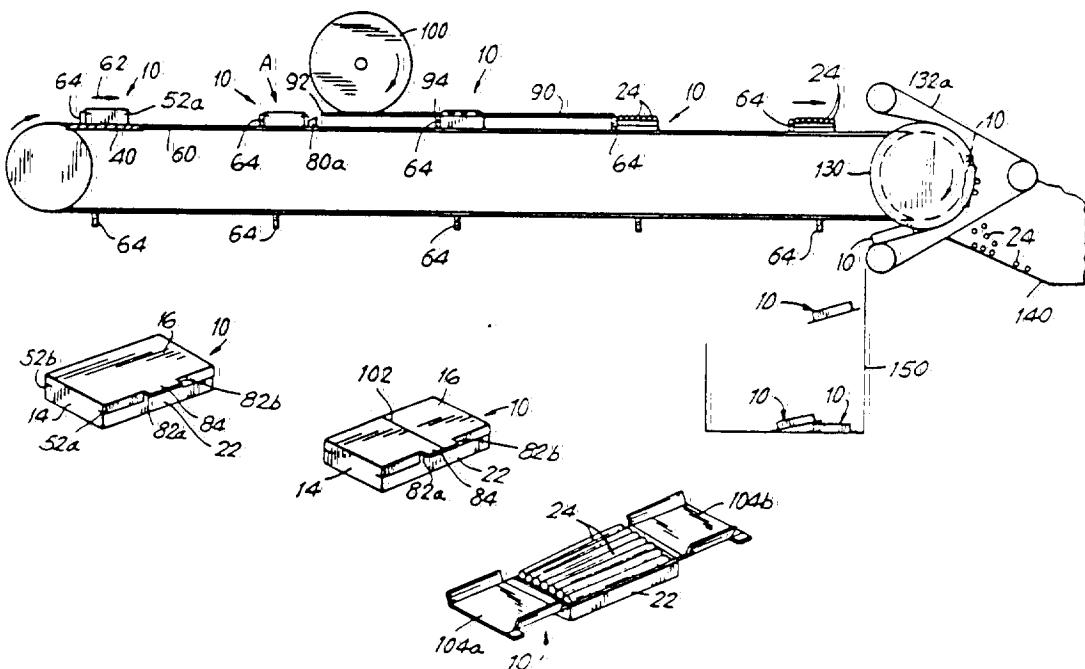
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[57] ABSTRACT

Methods and apparatus for opening containers such as cigarette packages without damaging the contents of the containers. If desired, the methods and apparatus may be extended to include emptying the containers after they have been opened.

23 Claims, 10 Drawing Sheets



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